IN THE CLAIMS:

Please substitute the following claims for the same numbered claims in the application.

(Currently Amended) A method of <u>dynamically</u> bidding, through a software agent, in
online auctions accessible over a communications network, said method including the steps of:
said agent initially receiving bidding-related information from a bidder;

said agent initially selecting a plurality of auctions to place bids in, in accordance with said bidding-related information and the a current status of one or more auctions, and placing bids in said plurality of auctions; and

said agent, on being outbid in an auction, itself determining, on the basis of said bidding-related information and the current status of one or more auctions, whether to place an additional bid and, if so, selecting an auction to place said additional bid in, and placing said additional bid in said selected auction.

wherein said bidding-related information received from said bidder comprises includes one or more constraints selected from the group consisting of:

a specified list of auctions to which the agent, without further recourse to said bidder, should restrict participation in;

specified limits on the values of bids that can be placed by said agent, without further resourse to said bidder, in various auctions:

a specified limit on the number of simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time;

a specified limit on the sum of values of all simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time; and

a specified rule for determining at any time, whether said agent, without further recourse to said bidder, should place additional bids and, if so, in which auctions to place said additional bids[[.]], wherein said specified rule comprises:

selection of an auction for placing a bid in, whether initially or on being outbid, by said agent, is to be such that a current bidder surplus of said bid is maximized and non-negative, wherein said current bidder surplus of said bid comprises an excess of a monetary value attached by said bidder to an item to be bid upon over a monetary value of said bid by said agent, and

selection of an auction for placing a bid in, whether initially or on being outbid, by said agent, is to be such that the current bidder profitability of said bid is maximized, and non-negative, wherein said current bidder profitability of said bid comprises a ratio of said current bidder surplus to said monetary value of said bid by said agent.

- 2. (Original) The method according to claim 1, wherein one or more of the auctions in which said agent places bids are located at different online auction sites.
- 3. (Original) The method according to claim 1 or claim 2, wherein the auctions in which said agent placed bids are scheduled to close for bidding at the same time.
- 4. (Original) The method according to claim 3, wherein said auctions open for bidding at the same time.

- 5. (Canceled).
- б. (Currently Amended) The method according to claim 1, wherein said specified rule includes:

selection of an auction for placing a bid in, whether initially or on being outbid, by said agent, is to be such that the current bidder surplus of said bid is maximized and non-negative, wherein said current bidder surplus of said-bid comprises a monetary value computed from said bid value and said specified limit on the value of the bid. bidding-related information received from said bidder further comprises any of: a specified list of auctions to which the agent, without further recourse to said bidder, should restrict participation in; specified limits on the values of bids that can be placed by said agent, without further recourse to said bidder, in various auctions; a specified limit on the number of simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time; and a specified limit on the sum of values of all simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time.

- 7. (Canceled).
- (Currently Amended) The method according to claim [[7]] 1, wherein said current bidder 8. profitability of said bid is further required to be greater than a bidder-specified minimum limit.
- (Currently Amended) The method according to claim 6-or claim 7 1, wherein: 9. said auctions are ascending price auctions for selling to bidders;

said specified limits on the values of bids that can be placed by said agent comprise maximum allowable values;

said specified limit on the sum of values of all simultaneously outstanding bids that said agent can have at any time comprises a maximum allowable value; and

said current bidder surplus for a bid is computed by said agent by subtraction of a new computed bid value from the maximum allowable bid value specified by the bidder, for a particular auction.

10. (Currently Amended) The method according to claim 6 or claim 7 1, wherein: said auctions are descending price auctions for purchasing from bidders; said specified limits on the values of bids that can be placed by said agent comprise minimum allowable values: and

said current bidder surplus for a bid is computed by said agent by subtraction of a minimum allowable bid value specified by the bidder from a new computed bid value, for a particular auction.

11. (Currently Amended) A method of conducting online auctions, said method including the steps of arranging offerings for auction in one or more selected groups;

constraining all of said auctions within the same group from said one or more selected groups to close for bidding simultaneously; and

soliciting bids in one or more of said auctions by software agents representing bidders, said software agents determining at any time, on the basis of bidding-related information input by a bidder and the a current status of one or more auctions, whether to place an additional bid and

if so, selecting the auction to place the bid in and placing the bid in said selected auction,
wherein said bidding-related information received from said bidder comprises includes
one or more constraints selected from the group consisting of:

a specified list of auctions to which the agent, without further recourse to said bidder, should restrict participation in;

specified limits on the values of bids that can be placed by said agent, without further recourse to said bidder, in various auctions;

a specified limit on the number of simultaneously outstanding bids that said agent, without-further resource to said bidder, can have at any time;

a specified limit on the sum of values of all simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time; and

a specified limit on a total value of each bid in each auction and a total value of all bids from all auctions; and

a specified rule for determining at any time, whether said agent, without further recourse to said bidder, should place additional bids and, if so, in which auctions to place said additional bids[[.]], wherein said specified rule comprises:

selection of an auction for placing a bid in, whether initially or on being outbid, by said agent, is to be such that the current bidder surplus of said bid is maximized and non-negative.

wherein said current bidder surplus of said bid comprises a monetary value computed from said bid value and said specified limit on the value of the bid, and

selection of an auction for placing a bid in, whether initially or on being outbid, by said agent, is to be such that the current bidder profitability of said bid is maximized, and non-negative, wherein said current bidder profitability of said bid comprises the ratio of a monetary



value computed from said bid value and said specified limit on the value of the bid to said bid value.

12. (Currently Amended) A system for <u>dynamically</u> bidding, through a software agent, in online auctions accessible over a communications network, including:

means for inputting bidding-related information from a bidder; and supporting said agent, wherein said agent initially selects a plurality of auctions to place bids in, in accordance with said bidding-related information and the a current status of one or more auctious, and places bids in said plurality of auctions;

said agent, on being outbid in an auction, itself determines, on the basis of said bidding-related information and the current status of one or more auctions, whether to place an additional bid, and, if so, selects an auction to place said additional bid in, and places said additional bid in said selected auction

wherein said bidding-related information received from said bidder <u>comprises</u> includes one or more constraints selected from the group consisting of:

a specified list of auctions to which the agent, without further recourse to said bidder, should restrict participation in;

specified limits on the values of bids that can be placed by said agent, without further recourse to said bidder, in various auctions;

a specified limit on the number of simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time;

a specified limit on the sum of values of all simultaneously outstanding bids that said agent, without further resourse to said bidder, can have at any time; and

a specified limit on a total value of each bid in each auction and a total value of all bids from all auctions; and

a specified rule for determining at any time, whether said agent, without further recourse to said bidder, should place additional bids and, if so, in which auctions to place said additional bids[[.]], wherein said specified rule comprises:

selection of an auction for placing a bid in, whether initially or on being outbid, by said agent, is to be such that the current bidder surplus of said bid is maximized and non-negative, wherein said current bidder surplus of said bid comprises a monetary value computed from said bid value and said specified limit on the value of the bid, and

selection of an auction for placing a bid in, whether initially or on being outbid, by said agent, is to be such that the current bidder profitability of said bid is maximized, and non-negative, wherein said current bidder profitability of said bid comprises the ratio of a monetary value computed from said bid value and said specified limit on the value of the bid to said bid value.

- 13. (Original) The system according to claim 12, wherein one or more of the auctions in which said agent places bids are located at different online auction sites.
- 14. (Original) The system according to claim 12 or claim 13, wherein the auctions in which said agent places bids are scheduled to close bidding at the same time.
- 15. (Original) The system according to claim 14, wherein said auctions open for bidding at the same time.

- 16. (Canceled).
- 17. (Currently Amended) The system according to claim 12, wherein said specified rule includes:

agent, is to be such that the current bidder surplus of said bid is maximized and non-negative, wherein said current bidder surplus of said bid comprises a monetary value computed from said bid value and said specified limit on the value of the bid. bidding-related information received from said bidder further comprises any of: a specified list of auctions to which the agent, without further recourse to said bidder, should restrict participation in; specified limits on the values of bids that can be placed by said agent, without further recourse to said bidder, in various auctions; a specified limit on the number of simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time; and a specified limit on the sum of values of all simultaneously outstanding bids that said bidder, can have at any time; and a specified limit on the sum of values of all simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time; and a specified limit on the sum of values of all simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time.

- 18. (Canceled).
- 19. (Currently Amended) The system according to claim [[18]] 12, wherein said current bidder profitability of said bid is further required to be greater than a bidder-specified minimum limit.

20. (Currently Amended) The system according to claim 17 or claim 18 12, wherein: said auctions are ascending price auctions for selling to bidders;

said specified limits on the values of bids that can be placed by said agent comprise 15 maximum allowable values;

said specified limit on the sum of values of all simultaneously outstanding bids that said agent can have at any time comprises a maximum allowable value; and

said current bidder surplus for a bid is computed by said agent by subtraction of a new computed bid value from the maximum allowable bid value specified by the bidder, for a particular auction.

21. Currently Amended) The system according to claim 17 or elaim 18 12, wherein: said auctions are descending price auctions for purchasing from bidders; said specified limits on the values of bids that can be placed by said agent comprise minimum allowable values; and

said current bidder surplus for a bid is computed by said agent by subtraction of a minimum allowable bid value specified by the bidder from a new computed bid value, for a particular auction.

22. (Currently Amended) A system for conducting online auctions, including: computing means for arranging offerings for auction in one or more selected groups; computing means for constraining all of said auctions within the same group from the said one or more selected groups to close for bidding simultaneously; and computing means for soliciting bids in one or more of said auctions by software agents representing bidders, said

software agents determining at any time, on the basis of bidding-related information input by a bidder and the <u>a</u> current status of one or more auctions, whether to place an additional bid and, if so, selecting the auction to place the bid in and placing the bid in said selected auction

wherein said bidding-related information received from said bidder <u>comprises</u> includes one or more constraints selected from the group consisting of:

a-specified list of auctions to which the agent, without further recourse to said bidder, should restrict participation in,

specified limits on the values of bids that can be placed by said agent, without further recourse to said bidder, in various auctions;

a specified limit on the number of simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time;

a specified limit on the sum of values of all simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time; and

a specified limit on a total value of each bid in each auction and a total value of all bids from all auctions; and

a specified rule for determining at any time, whether said agent, without further recourse to said bidder, should place additional bids and, if so, in which auctions to place said additional bids[[.]], wherein said specified rule comprises:

selection of an auction for placing a bid in, whether initially or on being outbid, by said agent, is to be such that the current bidder surplus of said bid is maximized and non-negative, wherein said current bidder surplus of said bid comprises a monetary value computed from said bid value and said specified limit on the value of the bid, and

03/23/2004



selection of an auction for placing a bid in, whether initially or on being outbid, by said agent, is to be such that the current bidder profitability of said bid is maximized, and non-negative, wherein said current bidder profitability of said bid comprises the ratio of a monetary value computed from said bid value and said specified limit on the value of the bid to said bid value.

23. (Currently Amended) A computer program product comprising a computer readable medium having a computer program recorded therein for <u>dynamically</u> bidding, through a software agent, in online auctions accessible over a communications network, said computer program including:

computer program code means for said agent initially to receive bidding-related information from a bidder;

computer program code means for said agent to initially select a plurality of auctions to place bids in, in accordance with said bidding-related information and the current status of one or more auctions, and to place bids in said plurality of auctions; and

computer program code means for said agent, on being outbid in one or more auctions, itself to determine, on the basis of said bidding-related information and the current status of one or more auctions, whether to place an additional bid and, if so, to select an auction to place said additional bid in, and to place said additional bid in said selected auction

wherein said bidding-related information received from said bidder <u>comprises</u> includes one or more constraints selected from the group-consisting of:

a specified list of auctions to which the agent, without further recourse to said bidder, should restrict participation in;

specified limits on the values of bids that can be placed by said agent, without further recourse to said bidder, in various auctions;

a specified-limit on the number of simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time;

a specified limit on the sum of values of all simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time; and

a specified limit on a total value of each bid in each auction and a total value of all bids from all auctions; and

a specified rule for determining at any time, whether said agent, without further recourse to said bidder, should place additional bids and, if so, in which auctions to place said additional bids[[.]], wherein said specified rule comprises:

selection of an auction for placing a bid in. whether initially or on being outbid, by said agent, is to be such that the current bidder surplus of said bid is maximized and non-negative, wherein said current bidder surplus of said bid comprises a monetary value computed from said bid value and said specified limit on the value of the bid, and

selection of an auction for placing a bid in, whether initially or on being outbid, by said agent, is to be such that the current bidder profitability of said bid is maximized, and non-negative, wherein said current bidder profitability of said bid comprises the ratio of a monetary value computed from said bid value and said specified limit on the value of the bid to said bid value.

24. (Original) The computer program product according to claim 23, wherein one or more of the auctions in which said agent places bids are located at different online auction sites.

- 25. (Original) The computer program product according to claim 23 or claim 24, the auctions in which said agent places bids are scheduled to close for bidding at the same time.
- 26. (Original) The computer program product according to claim 25, wherein said auctions open for bidding at the same time.
- 27. (Canceled).
- 28. (Currently Amended) The computer program product according to claim 23, wherein said specified rule includes:

selection of an auction for placing a bid in, whether initially or on being outbid, by said agent, is to be such that the current bidder surplus of said bid is maximized and non-negative, wherein said current bidder surplus of said bid comprises a monotary value computed from said bid value and said specified limit on the value of the bid. bidding-related information received from said bidder further comprises any of: a specified list of auctions to which the agent, without further recourse to said bidder, should restrict participation in; specified limits on the values of bids that can be placed by said agent, without further recourse to said bidder, in various auctions: a specified limit on the number of simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time; and a specified limit on the sum of values of all simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time; and a specified limit on the sum of values of all simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time.

- 29. (Canceled).
- 30. (Currently Amended) The computer program product according to claim [[29]] 23, wherein said current bidder profitability of said bid is further required to be greater than a bidder-specified minimum limit.
- 31. (Currently Amended) The computer program according to claim 28 or claim 29 23, wherein:

said auctions are ascending price auctions for selling to bidders;

said specified limits on the values of bids that can be placed by said agent comprise maximum allowable values;

said specified limit on the sum of values of all simultaneously outstanding bids that said agent can have at any time comprises a maximum allowable value; and

said current bidder surplus for a bid is computed by said agent by subtraction of a new computed bid value from the maximum allowable bid value specified by the bidder, for a particular auction.

32. (Currently Amended) The computer program according to claim 28 or claim 29 23, wherein:

said auctions are descending price auctions for purchasing from bidders;

said specified limits on the values of bids that can be placed by said agent comprise minimum allowable values; and

said current bidder surplus for a bid is computed by said agent by subtraction of a

minimum allowable bid value specified by the bidder from a new computed bid value, for a particular auction.

33. (Currently Amended) A computer program product comprising a computer readable medium having a computer program recorded therein for conducting online auctions, said computer program including:

computer program code means for arranging offerings for auction in one or more selected groups;

computer program code means for constraining all of said auctions within the same group from said one or more selected groups to close for bidding simultaneously; and

computer program code means for soliciting bids in one or more of said auctions by software agents representing bidders, said software agents determining at any time, on the basis of bidding-related information input by a bidder and the current status of one or more auctions, whether to place an additional bid and, if so, selecting the auction to place the bid in and placing the bid in said selected auction

wherein said bidding-related information received from said bidder <u>comprises</u> includes one or more constraints selected from the group consisting of:

a specified list of auctions to which the agent, without further recourse to said bidder, should-restrict participation in;

specified limits on the values of bids that can be placed by said agent, without further recourse to said bidder, in various auctions;

a specified limit on the number of simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time;

a specified limit on the sum of values of all simultaneously outstanding bids that said agent, without further recourse to said bidder, can have at any time; and

a specified limit on a total value of each bid in each auction and a total value of all bids from all auctions; and

a specified rule for determining at any time, whether said agent, without further recourse to said bidder, should place additional bids and, if so, in which auctions to place said additional bids[[.]], wherein said specified rule comprises:

selection of an auction for placing a bid in, whether initially or on being outbid by said agent, is to be such that the current bidder surplus of said bid is maximized and non-negative, wherein said current bidder surplus of said bid comprises a monetary value computed from said bid value and said specified limit on the value of the bid, and

selection of an auction for placing a bid in, whether initially or on being outbid, by said agent, is to be such that the current bidder profitability of said bid is maximized, and non-negative, wherein said current bidder profitability of said bid comprises the ratio of a monetary value computed from said bid value and said specified limit on the value of the bid to said bid value.